ABSTRACT

Methods and apparatus are provided for a composite structural material. A non-solid composite section that is filled with a structural foam that reduces the weight of the composite structural material. A solid composite section that is coupled to the non-solid composite section. The solid composite section is an area for structural attachment for the composite structural material. A region adjoining the non-solid composite section to the composite section is radiused to reduce stress when the structural foam is bonded to the region. The radius in the region prevents delamination and cracking of the structural foam when a load is placed on the composite structural material.